tunately, neither of these patients could be kept under observation for any lengthened period. Landolt has observed retinitis pigmentosa in a case of hepatic and also in a case of nephritic cirrhosis, and considers that it is a chronic inflammatory process, in which the nervous elements of the retina are destroyed by the connective tissue, formed in the first place in the adventitia of the peripheral retinal vessels. This process seems closely allied with the chronic inflammatory process resulting in contracted liver and contracted kidney; not that either of these conditions produces the retinal affection; but the patient affected with the two diseases has either by heredity, by syphilis, or some other cause, a disposition to the formation of connective tissue in certain organs. The degeneration of the retina depends on diminished nutrition, and is associated with a disappearance of the retinal pigment, and a migration of the same into the innermost retinal layers. Dr. Litten has also proved experimentally that the pathological pigment of the retina comes from the choroid, with which it is allied both histologically and chemically. How the migration of pigment takes place he cannot explain. He mentions, however, a fact recorded by Professor Bischoff, that two dogs, in which he had formed a biliary fistula, became completely amaurotic, and their eyes showed *post mortem* the appearances of retinitis pigmentosa as it occurs in the human eye; but the pigment was deposited also in the hyaloid membrane, and even in the lens.

The record of careful and prolonged observations like those of Dr. Litten is in the highest degree important. Through the work of Dr. Hughlings Jackson, we have in this country become aware of the importance of ophthalmoscopic examination in all cases of nervous affection, and we are probably all of us fully impressed with its value in Bright's disease; but we are still too much inclined to isolate the ophthalmoscopic changes as peculiar to the eye, and having little or no association with changes occurring in other organs. Such observations as those of Dr. Litten, recorded above, have a general value in correcting this error, as well as a special value in extending our knowledge of ophthalmic diseases. At the same time, we must remark that the value of his observations would have been very considerably increased, had he stated in what proportion of patients with liver-disease retinal changes occur, and also had he stated definitely in each case that there was no possibility of complication.—*London Med. Rec.*, June 15, 1882.

MIDWIFERY AND GYNÆCOLOGY.

The Acceleration of Delivery in Puerperal Convulsions.

A recent number of the *Arch. f. Gynäkol.* contains an article entitled "A Contribution to our Knowledge of Eclampsia," by Dr. Fr. SCHAUTA, assistant in the clinic of Professor Späth, of Vienna. The paper gives statistics based upon the large number of 134,345 labours, among which 344 cases of convulsions occurred. Figures are furnished bearing upon many points in the natural history of this disease, which are of much value, and deserve the attention of specialists.

Convulsions coming on during pregnancy quite as often, according to Dr. Schauta, persist during labour, as cease before that process begins.

The commonly received opinion that convulsions first attacking the patient during labour, commonly cease when delivery is complete, Dr. Schauta finds to a great extent negatived by the facts he has collected.

The practical point, says Dr. Schauta, which springs out of these results seems to be this—that in labour complicated with convulsions the accoucheur should not allow himself to be persuaded into operative delivery unless the clearest indications exist, and the necessary conditions are present; and that the *accouchement forcé*, now on other grounds rightly abandoned, should, looking at the prognosis of puerperal eclampsia, be unconditionally condemned. Our author proceeds to test this practical conclusion by analyzing the cases according to whether or not labour was artificially completed. Out of the 42 cases of convulsions occurring during pregnancy, 20 were delivered spontaneously, 21 by the help of the accoucheur (one passed from observation undelivered). Of the former, 2 died, or 10 per cent.; of the latter, 19, or 90.4 per cent. This 19, however, includes 5 who were delivered by Cæsarean section after the death of the mother; the subtraction of these reduces the mortality to 87.5 per cent. Of course it will be obvious that the cases in which interference to effect delivery was resorted to, were in all probability the worst cases, and the enormous difference in the result between those left to nature and those artificially delivered is probably for the most part to be accounted for in this way. But admitting this, it is also evident that the acceleration of labour did not do very much for the patients. The result shown by cases of convulsions coming on during labour is much the same. There are, however, two good reasons, our author points out, for hastening delivery—if we can do so without doing harm. The first is, that by emptying the uterus, the intra-abdominal pressure, which in the large majority of cases is a main cause of the kidney-changes which produce eclampsia, is reduced, and therefore the earlier delivery takes place, the earlier the *restitutio ad normam* may be expected to begin. The second is, that the sooner delivery is effected, the better chance the child has of survival. The risk to the child, as well as to the mother, Dr. Schauta shows, is in proportion to the number of the fits. The prognosis for the child is, as perhaps might be expected, worse when the fits come on before, than when they commence during labour. The infantile mortality among the cases of the former class which Dr. Schauta tabulates was 41.8 per cent.; among those of the latter, 20.5 per cent.

In considering, in the light of these figures, whether in eclampsia delivery ought to be hastened, the question naturally occurs, whether the bad results enumerated may not have been the result of an aggravation of the nervous condition by the operation necessary to effect delivery, *i. e.*, whether operative delivery *per se* has any influence in producing convulsions. Dr. Schauta has, with this point in mind, analyzed the cases in which eclampsia appeared after labour. He finds that 74 of these had been naturally delivered, of whom 19 died, or 25.6 per cent.; 8 had been delivered by operative aid, of whom 2 died, or 25 per cent.—a proportion nearly the same.

These figures seem to us of considerable practical moment. It would be going too far to regard the high mortality among those who were delivered by art as due solely to the mere fact of interference. It seems to us largely explained by the consideration that the cases in which this treatment was resorted to were probably the worst; and it may also have been sometimes the case that the state of the patient led the medical attendant to hurry delivery more than he would have done had death seemed less imminent, and in doing so to inflict damage which might have been avoided had less haste been used. If pregnancy has anything to do with the causation of the disease in question—and that it has, we think, there cannot be a doubt—we might expect that the removal of so powerful a cause would favour recovery. But Dr. Schauta's cases show this—that there is no such immediate advantage as to justify us in running any risk of other dangers for the sake of speedily ending the pregnancy. If labour has begun, or if it has been induced, it is best left to take its course with the minimum of interference. It seems to us still an open question whether labour may not be induced with advantage, provided the process be conducted in a manner as closely as possible approximating to that of nature; but whether induced or at the natural term, such interference as would be called for if there were no convulsions is alone that which is required. Everything further is submitting the patient to unnecessary risk, without any compensating advantage.—*Med. Times and Gaz.*, Sept. 2, 1882.

A Modified Procedure in Cæsarean Section.

KEHRER (*Arch. f. Gynäkol.* 2, 1882) publishes a lengthy paper on a *modified procedure in Cæsarean section.* This operation would not have so dangerous a rival in the method of Porro were it not for the magnificent series of changes which has been effected by the antiseptic theory. The negative influence of this theory upon the Cæsarean operation is due to the fact that we have not yet learned to close the uterine wound so securely as to prevent the entrance of lochia into the abdominal cavity. Three methods of closing the uterine wound have obtained: 1. Lebas's (*Journal de Médecine*, Supplément de l'Année 1770, p. 177), which is the simple bringing together of the sides with sutures. 2. Pilloris's (*Gazette des Hôpitaux*, 1854, p. 148), and E. Martin's (*Monatsschrift für Geburtskunde*, Band 23, p. 334), by which the edges of the uterine wound are attached to the corresponding edges of the abdominal wound. 3. Frank's (*Centralblatt für Gynkäologie*, 1881, p. 25), by which the round ligaments are united to each other, and to the edges of the abdominal wound, with drainage of the ante-uterine space. [A description of this method will be found in the March number of the Journal, p. 302.] In the first-mentioned operation the sutures sometimes fail to hold, perhaps on account of after-pains, or from the involution process, or by reason of lochial infiltration. In the second operation the lochia can, indeed, be kept out of the abdominal cavity, but contraction and involution of the organ may be seriously interfered with, from the position which the uterus is made to assume. Since all these methods are ineffective, it is desirable in this operation: 1. To find a point at which the edges of the uterine wound are least inclined to gape. 2. To discover a reliable method of suturing. 3. To prevent infection, and to carry off the peritoneal transudation and the lochia. To accomplish these ends the author proposes: 1. An horizontal incision at the anterior aspect of the os internum. 2. Double uterine suturing—that is, suturing of the muscular tissue and also of the peritoneum. 3. Precise antiseptic precautions, drainage of the peritoneal cavity, irrigation, and possibly drainage of the genital canal during the puerperal period. The reasons for the first proposition are: 1. There will be less tendency of the uterine wound to gape. 2. Hemorrhage will be less free, as the placenta is rarely located in this position. 3. The abdominal incision can be shortened by this operation. 4. The fœtal head will commonly be met with at this site, and extraction will be facilitated. 5. Over and under the os internum the peritoneum is connected to the uterus by subserous connective tissue, which is easily separated. As objections to this operation thus modified, may be urged: 1. The narrowness of the opening and the consequent danger of its forcible enlargement in removing the fœtus. 2. The danger of opening the great venous plexuses at the side of the uterus or near the os internum. 3. The lochia can easily pass into the subserous connective tissue behind the bladder and cause a parametritis. The second proposition has been called for, as already stated, on account of the contractions which accompany involution. The double series of sutures, together with careful antiseptic precautions, will prevent the entrance of lochia into the peritoneal cavity. As to the third proposition, the most stringent antiseptic precautions are necessary. Experience has taught the author that it is better in every Cæsarean section to use several drainage-tubes. It is also well to introduce thoroughly carbolized